

REMARKS

Claims 8 and 10-20 are in this application.

Reconsideration of the rejection of claims 8-11 and 14-17 under 35 USC 103(a) as unpatentable over Brooks (US 3,132,366) in view of Gutris (US 3,707,037) is respectfully requested. Claim 8 has been amended to include the limitations of claim 9. Thus, claim 8 specifically calls for an electric-motor drive device having a metal gear housing and a metal cup-shaped motor housing that is slipped with an opening edge onto the gear housing and fixed thereon by roller-burnishing at two points axially spaced apart from one another with two different roller-burnishing tools. The structure recited in claim 8 is illustrated in Fig. 1, wherein the motor housing 13 is joined solidly and permanently to the gear housing 17 at two points 22 and 23, longitudinally or axially spaced apart from one another. This creates a very reliable connection, in which for long periods, even under extreme operating conditions, no play can occur between the two housings.

Brooks shows an electric-motor drive device having a gear housing 34 and a cup-shaped motor housing 11 that is slipped with an opening edge onto an end of the gear housing and secured thereto by a pair of bolts 12. See col. 2, ll. 21-24.

Gutris teaches a method of assembling an electric motor without the use of bolts wherein a cup-shaped metal motor housing 10 is slipped with an opening edge onto a rib 30 formed on a head plate 14. The head plate includes a rib 30 provided with a continuous groove 32 (Figs. 3 and 4) or notches 32' (Fig. 5) into which the opening edge of the motor housing is deformed to lock the components together. It is important to note that the deformation taught by Gutris occurs within a single axially plane. In

other words, Gutris lacks any teaching of clinching the end portion of the motor housing at two points axially spaced apart from one another as required by claim 8.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Neither Brooks nor Gutris teaches or suggests an electric-motor drive device of the type recited in claim 8 in which the motor housing is joined solidly and permanently to the gear housing at two points axially spaced apart from one another. Accordingly, claim 8 is not rendered obvious by the combined teachings of Brooks and Gutris.

Further, the test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from knowledge generally available to one of ordinary skill in the art and not from the applicant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1052 (Fed. Cir.), *cert. denied*, 488 U.S. 825 (1988). The mere fact that the prior art structure could be modified does not make such a modification obvious unless the prior art suggests the desirability of doing so. In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Suggestion

arising from applicant's disclosure is impermissible as the basis for a rejection. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)

The examiner opines that it would have been obvious “to modify the electric motor of Brooks with the end housing of Gutris for the purpose [of] improving the transfer of heat between the two housing[s] and eliminate the need for fasteners.” However, there is no teaching or suggestion in Gutris of a motor housing joined to a gear housing at two points axially spaced apart from one another. Further, there is no motivation in Gutris to do so, since Gutris obtains a permanent connection between the head plate 14 and the casing 10 by means of a deformation of the casing wall in a single axially plane. In fact, the only suggestion for modifying Brooks in the manner necessary to arrive at the applicants’ invention recited in claim 8 stems from hindsight knowledge derived from the applicants’ own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 USC 103 is, of course, impermissible. It follows that the rejection of claim 8 (formerly, claim 9) under 35 USC 103 in view of the combined teachings of Brooks and Gutris is improper.

Reconsideration of the rejection of claims 12, 13 and 18-20 under 35 USC 103 as unpatentable over Brooks in view of Gutris in combination with Bayha (US 4,694,211) is also respectfully requested. Bayha is cited by the examiner for a teaching of an electric motor comprising a motor housing (10) inclosing a stator and a short circuit ring (16) secured to the permanent magnets (17) and an encompassing angular chamfer (B) slipped with positive engagement until the annular end face meets a radial leg face (16b) of the chamfer (B) for the purpose of preventing the permanent magnets from being damaged.

Claims 12, 13 and 18-20 are dependent on claim 8 and, therefore, include all of the limitations of the base claim. Bayha, like Brooks and Gutris, fails to teach or suggest an electric-motor drive device of the type recited in claim 8 in which the motor housing is joined solidly and permanently to the gear housing at two points axially spaced apart from one another. Thus, Bayha does not cure the above discussed shortcomings of the Brooks-Gutris combination with respect to the subject matter recited in parent claim 8. Accordingly, claims 12, 13 and 18-20 are not rendered obvious by the combined teachings of Brooks, Gutris and Bayha.

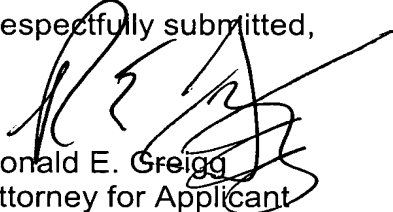
In accordance with the foregoing, applicants respectfully request that the examiner reconsider and withdraw the outstanding rejections. If, however, the examiner feels that any further issues remain or require clarification, the examiner is cordially invited to contact the undersigned in order that any such issues may be promptly resolved.

Dated: January 22, 2003

GREIGG & GREIGG, P.L.L.C.
1423 Powhatan Street, Suite One
Alexandria, VA 22314
Tel. (703) 838-5500
Fax. (703) 838-5554

REG/JFG/hhl

Respectfully submitted,



Ronald E. Greigg
Attorney for Applicant
Registration No. 31,517
Customer No. 02119

MARKED-UP VERSION OF THE CLAIMS

Claim 8 has been amended as follows:

8. (Twice Amended) An electric-motor drive device for auxiliary devices in motor vehicles, such as sliding roofs, window controls, windshield wipers, and the like, having a metal gear housing (17) and a metal cup-shaped motor housing (13) that is slipped with an opening edge (131) onto the gear housing (17) and fixed thereon, the improvement wherein the slipped-on region of the motor housing (13) that fits over the gear housing (17), is roller-burnished into the gear housing (17), wherein the roller-burnishing is done at two points axially spaced apart from one another with two different roller-burnishing tools.